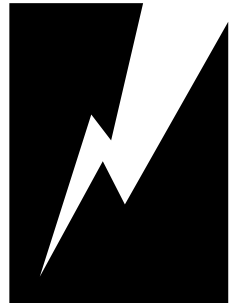


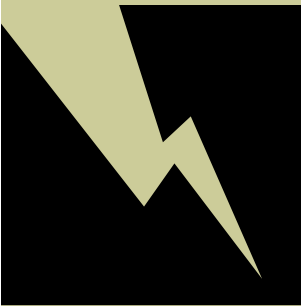
# Indiana Tech Flash

Indiana's Most Comprehensive Electronic Resource For  
Engineering & Technology Education.



Special points of  
interest:

- 16 Pages of Resources!
- The New IDOE Vision & Plan



Features inside this  
issue include:

Engineering: Go For It Free Magazine	2
Defined STEM FREE Trial	2
Pro/E CAD Up to \$1 Million of Software for FREE	3
Game3 Project Earn \$200	4
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Blender Animation Software for FREE	7
Fall Conference Information	4-15

October 2009

## Indiana IMSTEA Super Mileage Challenge



collaboration to inspire and engage students in the design, engineering, and testing of eco-smart transportation.

The teams achieving the highest mpg at the April 27, 2009 event were Greenfield Central High School with 1,048.79 mpg and Mater Dei High School with 1,293.09 mpg.

***The 2010 Super Mileage Challenge is scheduled for April 26, at O'Reilly Raceway Park in Indianapolis.***

In order to participate please complete the [Letter of Intention to Participate](#) prior to October 23, 2009.

[http://www.doe.in.gov/octe/technologyed/about\\_IMSTEA.html](http://www.doe.in.gov/octe/technologyed/about_IMSTEA.html)

Since 1995, IMSTEA and dedicated partners from Ball State University, Engineering/Technology Educators of Indiana, Indiana Department of Education, Indiana State University, Purdue University, O'Reilly Raceway Park at Indianapolis, Vincennes University, and teachers from throughout the state work in



## Upcoming Dates for 2009 - 2010!

- [FIRST Robotics Cage Match](#) (Southport High School) – October 17, 2009
- [E/TEI Fall Conference](#) (Indianapolis) — November 1 & 2, 2009
- [ISU Tech T.R.E.K](#) (Terre Haute) November 5, 2009
- [ITEA Conference](#) (Charlotte, NC) — March 18-20, 2010



VU is committed to broadening the dual credit options available to Indiana students and providing them with opportunities to receive hands-on college experience in career and technical areas. With this in mind, we are pleased to announce that beginning in the Fall of 2009, **Project EXCEL will waive the tuition fee** for students enrolled in dual credit courses in select career and technical areas.

[http://www.vinu.edu/cms/opencms/academic\\_resource](http://www.vinu.edu/cms/opencms/academic_resource)



### Time Engineers Special Offer!

Engineering & Technology teachers can now receive a FREE 0-25 seat license of Time Engineers just for signing up on our new social networking community for Time Engineers.

For more details contact Ray Shingler of Software Kids at [www.software-kids.com](http://www.software-kids.com)



### Welcome to Technical Education Magazine!

Technical Education Magazine (ONLINE and IN PRINT), encourages, enlightens and inspires educators in the Technical, Technology, Industrial, Vocational, and

Pre-Engineering Fields. Leaders of Industry ensure continued relevance to our audience needs. Over 160,00 Professionals in 14,750 School Districts are influenced by our service. Total coverage of the Technical

Programs is in Junior College, Vocational Schools, High Schools and Middle Schools.

<http://www.techedmagazine.com/home>



### Defined STEM Offers FREE Trial of Education Media for Indiana Schools

We have developed a unique approach to integrating STEM

education into the classroom. The foundation of Defined STEM is our career based videos that interview various professionals (from NASA Engineers to Architects) depicting how

they use science, technology, engineering and math in their day to day vocation.

<http://stem.definedlearning.com>

Enter the *Promo Code*: **INSTEM**

For more info contact Brannan Kenny at (847) 481-8073

### eGFI – (Engineering: Go For It)



A new magazine and website with resources for k-12 students and teachers to support engineering education. The newly expanded eGFI – (Engineering: Go For It) a multi-media exploration of engineering for middle and high-school students, has just been published.

The package combines a website and a magazine, available in print and online, that opens up the

world of engineering with profiles and features on an array of engineering disciplines, opportunities for discovery, and careers. According to ASEE, educators recognize that engineering, which stresses hands-on teamwork and imaginative problem solving, stimulates and enriches math and science learning.

<http://egfi-k12.org/>



**DoDEA curriculum standards for Math, English/Language Arts, Science, Social Studies and more.**

Video modules have been developed to provide guidance and an explanation of the revised

standards. As we begin to implement the updated standards, these modules will be an important tool in helping educators to become familiar with the revisions to the standards. The modules contain examples of what a standard looks like for a particular grade level or

course to further assist teachers with planning instruction.

Click [here to access the video modules](#).

**PTC Pro/Engineer Academy**

**Gain nearly 1 million worth of **FREE** CAD Software today!**

Welcome to the PTC/Academy learning portal. Here you will find self directed and self paced tutorials to get you started using your FREE Pro/ENGINEER Wildfire!

<http://www.ptcacademy.com/>

**NAR Instructional Video**

Two years ago the NAR and the Aerospace Industries Association produced a one-hour instructional video "How to Build and Fly a Model Rocket" in support of student teams in the Team America Rocketry Challenge student rocketry contest, an annual national event that the two organizations co-sponsor.



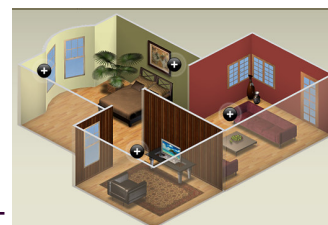
**The F1 Challenge**

is open to middle and high school level students worldwide. F1 team members learn and work in CAD, CAM, and CNC programs as they perform various activities at each phase of a five-step process to design, analyze, make, test and race a 1/20th scale F1 car. USA teams may face

an elimination event at the state level, in order to qualify for participation in the national challenge, which takes place each year at TSA's national conference. Participation in the USA F1 Challenge involves an annual team fee of \$150. This fee covers team registration and all items in the F1 Challenge Kit (F1 rules book, two car kits, free software options, etc.). If you have students who would like to work

together as a F1 team, complete the [F1 Challenge Agreement Form](#) and fax or mail it along with the payment to TSA. For more details contact Hillary Lee at 703/860.9000, ext. 16 or at [hlee@tsaweb.org](mailto:hlee@tsaweb.org)

[www.f1inschools.com](http://www.f1inschools.com)



**Autodesk Project Dragonfly**

allows you to streamline your next home improvement project by using Dragonfly's intuitive design tools to rapidly create and furnish your floor plan, experimenting in real time with your ideas in 2D and 3D before making it real.

<http://dragonfly.autodesk.com>



**The Game3 project** team would like to invite you to participate in an ongoing research exploring student attitudes towards environmental/ecological engineering.

Do you know whether paper or plastic cups are better for the environment? Do you want to learn about green technology, the environmental impacts of products, and how to integrate these topics into your classrooms?

**Workshop Objectives:**  
You will learn about green technologies, measuring the carbon footprint, and Life Cycle Analysis (LCA), a fascinating engineering tool. You will participate in a focus group interview session in which you have the opportunity to discuss what you learned.

### **Compensation for Participation**

When you complete two workshops and one focus group interview session, **you can earn up to \$200.00.** (\$100.00 for your participation and \$100.00 to cover the cost of a substitute),

*Would you like to learn more?* Please contact: Constance Harris at [harris11@purdue.edu](mailto:harris11@purdue.edu) for additional details.



### **NASA Career Information**

NASA Education has launched a new Web page that serves as a starting point to learn about jobs at NASA. Visit the site to learn more about scientists, technical experts, engineers,

mathematicians, physicists, accountants, attorneys, astronauts, educators, pilots, astronomers and experts in many other fields.

Features include: opportunities for students to intern at NASA, programs for visiting faculty, profiles of NASA employees, descriptions of jobs at NASA, posters and resources with career information, descriptions of NASA education programs, career pages with content sorted by grade levels.



<http://www.nasa.gov/audience/forstudents/careers-index.html>



### **Video discussing the Design Process**

This video segment, adapted from *Thinking Big, Building Small*, demonstrates each part of the engineering design process, which is fundamental to any successful project.

Though it does this in the context of building skyscrapers, the process is applicable to any sort of project, including constructing schools, building bridges, and even manufacturing sneakers. Students will recognize the value of going through its steps



sequentially when constructing scale models.

<http://www.teachersdomain.org/resource/phy03.sci.engin.design.desprocess/>



### **NASA Tech Briefs**

NASA's Tech Briefs feature text, Technical Support Packages (TSPs) and free white papers that provide information about the technology being developed with NASA in a technical brief.

If a TSP is available, there will be a link at the end of the tech brief article.

<http://www.techbriefs.com/>





### Model of NASCAR

A paper model for your students to construct!

[http://  
www.bkracing.com/  
downloads/pdf/  
BK\\_Papercraft\\_Model.  
pdf](http://www.bkracing.com/downloads/pdf/BK_Papercraft_Model.pdf)



### Fluid Power Journal

To start your complimentary subscription, take the time to fill out the questionnaire. The Fluid Power Journal strives to be your resource for the latest information regarding: hydraulics, pneumatics, vacuum, and motion control products, companies and services throughout the industry. In our 10 issues and online, from features on the latest and greatest in the industry to departments covering the IFPS, NFPA, FPDA, and other organizations we aim to inform and continually educate the fluid power professional.

[http://  
www.fluidpowerjournal.  
com/](http://www.fluidpowerjournal.com/)

### Tech Tips for Teachers

Comcast and Discovery Education are proud to present a series of online and in-person training sessions just for Indiana teachers. Each is jam-packed with tips for integrating digital media in the classroom and engaging digital learners.

[Learn More ▶](#)



### Discovery Education and Comcast have launched Discovery Education On Demand By Comcast,

a first-in-the-nation service delivering Indiana

families instant and convenient at-home access to digital educational media, homework help tools and more. The new service is available at no additional cost exclusively to local Comcast Digital Cable

customers and online to all Indiana parents and students. Lt. Governor Becky Skillman and Dr. Tony Bennett joined parents, teachers and students to kick-off the service supporting student academic achievement today at a special event.

[http://  
comcast.discoveryeduc  
ation.com/](http://comcast.discoveryeducation.com/)



### OpenOffice.org 3

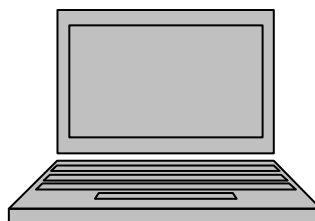
is the leading open-source office software suite for word processing, spreadsheets,

It stores all your data in an international open standard format and can also read and write files

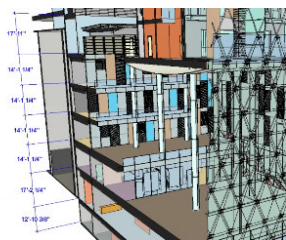
presentations, graphics, databases and more. It is available in many languages and works on all common computers.

from other common office software packages. It can be downloaded and used completely free of charge.

[http://  
why.openoffice.org/](http://why.openoffice.org/)







**Graphisoft** offers the fully functional Education Version of **ArchiCAD®** for Students and Teachers for free!

[http://www.graphisoft.com/company/about\\_graphisoft/](http://www.graphisoft.com/company/about_graphisoft/)



### FlightGear

The goal of the **FlightGear** project is to create a sophisticated flight simulator framework for use in research or academic environments, for the development and pursuit of other interesting flight simulation ideas, and as an end-user application. We are

developing a sophisticated, open simulation framework that can be expanded and improved upon by anyone interested in contributing

<http://flightgear.org/index.shtml>



### The Sitting Machine

What happens when 10-year-olds are given the chance to unleash their creativity in the classroom!

<http://www.thesittingmachine.com/>



**RubiStar** is a free tool to help teachers create quality rubrics.

<http://rubistar.4teachers.org/index.php>



### Go!

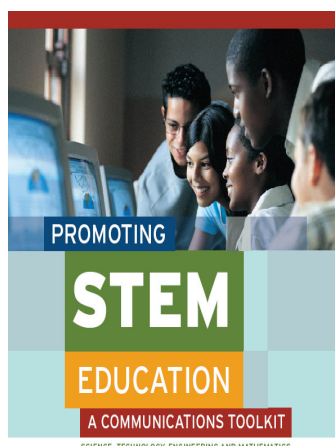
is a free, online magazine for teens and young adults that explores the world of transportation and the careers they can find there. *Go!* is an online magazine for teens

and young adults ages 14–20. The magazine covers transportation from all angles, from the infrastructure to the vehicles to the people behind the wheel—whether that “wheel” is on a car, truck, train, plane,

or ship.

<http://www.go-explore-trans.org/>





### **A Communications Tool Kit for Promoting STEM Education from the NBA Center for Best Practices**

This toolkit is designed to support governors in communicating the need to provide a high-quality STEM education.

Intended for all K-12 students, based on NGA's policy

recommendations regarding STEM, and the long-term benefits of such an effort for each state's education and economic future.

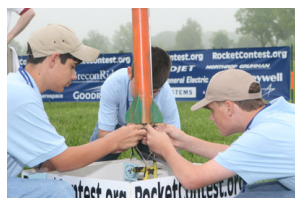
<http://www.nga.org/Files/pdf/0804STEMTOOLKIT.PDF>



### **Blender 3-D design and animation software**

Blender is the free open source 3D content creation suite, available for all major operating systems

<http://www.blender.org/>



### **Team America Rocketry Challenge Registration Opens**

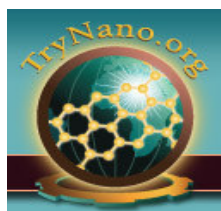
Registration for the

world's largest rocket competition, the Team America Rocketry Challenge, is open to 750 student teams in grades 7-12 from any U.S. school, home school or non-profit youth organization.

Registration for the 2010 spring contest is open now through November 30.

The annual rocket contest, sponsored by AIA, challenges teams of three to 10 students to design and build a rocket that will climb to 825 feet with a raw egg payload and stay aloft for 40 to 45 seconds. The payload must then return to earth unbroken.

<http://www.rocketcontest.org/>



### **IEEE LAUNCHES NANOTECHNOLOGY SITE WITH EDUCATIONAL RESOURCES**

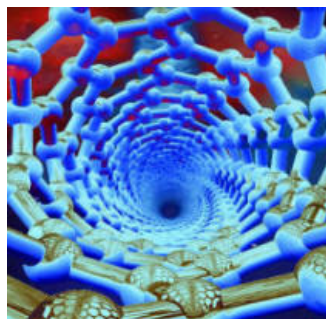
To explain the ins and outs of the technology, Triangle Coalition member, IEEE, has

launched TryNano.org a web site developed in conjunction with IBM and the New York Hall of Science. The site provides an overview of nanotechnology and also provides information about applications and nanomaterials.

A special teacher area provides a pathway through the site for educators. TryNano.org was led by the IEEE Nanotechnology Council

and the IEEE Educational Activities Board.

<http://www.trynano.org/>



### **Architect Studio 3D**

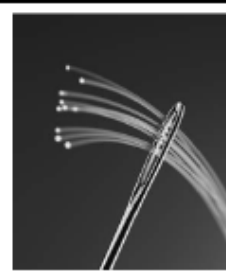
Design a House with Frank Lloyd Wright



### **Design Studio**

On this Web site, you can design a house, walk through it in 3D, and then share it with the world. You can also learn more about architecture, past and present, and explore Frank Lloyd Wright's life and work.

<http://www.architectstudio3d.org/AS3d/home.html>



## Engineering/Technology Educators of Indiana

### 78<sup>th</sup> Annual Conference "The Heart of STEM Education"

Date: October 31, 2009 – November 2, 2009

Location: Indianapolis Embassy Suites North

3912 Vincennes Road

Indianapolis, Indiana 46268

*The 78<sup>th</sup> annual conference of ETEI is titled "The Heart of STEM Education". Features of this conference include professional development sessions, hands-on sessions, networking opportunities, vendors, and much more!*

#### Schedule for Saturday October 31, 2009

- 9:00-4:00 Session 1: Lego Robotics—Preconference Workshop (for pre-service, elementary and/or middle school teachers) In this hands-on workshop participating STEM teachers will gain experience how to use Lego NXT robots in the classroom and as a part of student competitive events. This workshop is limited to 16 participants from 8 schools. Applications to participate are due by October 20, 2009.
- 9:00-4:00 Session 2: CAD Academy—Preconference Workshop (for pre-service, middle and/or high school teachers). A comprehensive pre-engineering, pre-architecture and interdisciplinary program developed for the K12 and community college market. Track One: 3 HR - Mechanical featuring SolidWorks participants will experience the form, fit and function of 3D mechanical design before it is built (STEM centric) Track Two: 3 HR - Architecture featuring ArchiCAD participants will learn how the power of BIM will unlock student potential and vault your design program to new heights. Applications to participate are due by October 20, 2009

#### Schedule for Sunday November 1, 2009

- 11:00-3:00 E/TEI Conference Registration Opens
- 12:00-12:45 E/TEI General Session – "The Heart of STEM". Welcome by E/TEI President, Gary Gray, and featured speaker, Indiana Superintendent of Public Instruction, *Dr. Tony Bennett*.
- 12:55-1:20 Curriculum Committee Updates. Presenter: *Dr. Richard Seymour*
- 1:30-2:00 Conference Planning and Updates. Presenter: *Mr. Doug Dillion*
- 2:15-3:13 Session 1: Curriculum Committee Meeting. Moderator: *Dr. Richard Seymour*
- Session 2: Different Curriculum Approaches to Teaching Advanced Manufacturing. A discussion on different curriculum approaches being used as the secondary level to teach advanced manufacturing. Information on AME 21, MSSC, and Independent programs will be discussed.
- Session 3: New Tech High Schools: Multiple Approaches for Successful Results. Learn more about new tech high schools, how they work, advantages, disadvantages, and how to get involved.
- Session 4: Project Lead the Way Gateway to Technology Help Session. Looking for troubleshooting techniques or how-to answers to help you in your Gateway Classroom? This hands-on session will focus on answering your questions to better help you teach your students. **ALL PARTICIPANTS MUST BRING THEIR PLTW LAPTOP TO PARTICIPATE.** 2 Hour Session—Presenter: *Dr. George Rogers*



	<p>Session 5: <b>Project Lead the Digital Electronics Help Session.</b> Looking for troubleshooting techniques or how-to answers to help you in your Digital Electronics Classroom? This hands-on session will focus on answering your questions to better help you teach your students. <b>ALL PARTICIPANTS MUST BRING THEIR PLTW LAPTOP TO PARTICIPATE. 2 Hour Session</b>—Presenter: <i>Mr. Larry Grigs</i></p>
3:30-4:30	<p>Session 1: <b>How You can Help Shape the Future of E-TEI: How Teachers Can become Active in the Professional Association</b>—<i>Mr. Gary Gray</i></p> <p>Session 2: <b>Alternative Energy.</b> ECI Wind and Solar is an East Central Indiana based renewable energy service company. Their goal is to provide consumers with superb education with unparalleled service and sales of renewable energy products. ECI Wind and Solar started around the turn of the century when the founders needed to power their remote home sites. At the time, there was very little information available for someone who wished to learn about this exciting technology on their own. After a few years of study the company felt confident enough to purchase and install a small off the grid system in a remote cabin. For the first time in history there was power at the ECI Wind and Solar Home. Presenter: <i>Mr. Eric Cotton</i></p> <p>Session 3: <b>Fluid Power for the Classroom.</b> An interactive curriculum that utilizes both hands on experience and web based lessons for the middle and high school classrooms. The Portable Fluid Power Demonstrator (PFPD) allows students to work with pneumatic and hydraulic systems in addition to introducing them electronic controls. The web based materials provide teachers instruction manuals and videos, student lessons, and extra resources related to fluid power. The scope of this project was to design and build a fluid power demonstration kit and accompanying curriculum to attract middle and high school students to science and engineering majors. It fits many school programs due to its low cost, portability and low resource requirements. Moreover, it can be used to teach simple concepts like velocity-flow and pressure-force relationships or can be extended to more involved concepts such as microcontroller and robotics. —Presenter: <i>Mr. Brian Bettag</i></p> <p>Session 4: <b>Project Lead the Way Gateway to Technology Help Session</b>—Continued</p> <p>Session 5: <b>Project Lead the Digital Electronics Help Session</b>—Continued</p>
4:45-5:45	<b>Technology and Engineering Education Teacher Educator Meeting</b> — <i>Hosted by Indiana State University</i>
6:00-10:00	<b>Food, Fun, and Fellowship</b> — <i>Join E/TEI for a group evening of events that include, food, fun, and fellowship. Gather in the hotel lobby for pizza and a movie or pizza and social hour. Pizza will be provided by E/TEI.</i>
<b><u>Schedule for Monday November 2, 2009</u></b>	
7:30-Noon	<b>Conference Registration Open</b> (hotel lobby)
8:00-9:00	<p>Session 1—<b>Funding Your Technology and Engineering Education Program.</b> If there is one constant in technology it is change! We work in a field that is constantly changing; however, the change doesn't only happen in the classroom. This presentation will focus on changes that have occurred in Technology and Engineering Education and Career and Technical Education courses in Indiana and funding that can support them. Presenter: <i>Mr. Doug Dillion</i></p>

	<p>Session 2—<b>Getting High School and Middle School Students Involved in Co and Extra-Curricular STEM Activities.</b> Looking for a way to introduce various programs to your school and students? This session will focus on how-to implement many of the most popular co and extra-curricular activities today. Some activities include FIRST Robotics, Lego League, VEX robotics, IMSTEAs, and more! Presenter: <i>Mr. Steve Florence</i></p>
	<p>Session 3—<b>Going Green in the Middle School: Approaches for Creating a Green Curriculum at the Middle School Level.</b> This session will focus on how teachers can use ordinary classroom consumables and equipment to introduce “going green” to middle school students. Presenter: <i>Mr. C.J. Shields</i></p>
	<p>Session 4—<b>Project Lead the Introduction to Engineering Design Help Session.</b> Looking for troubleshooting techniques or how-to answers to help you in your Introduction to Engineering Design Classroom? This hands-on session will focus on answering your questions to better help you teach your students. <b>ALL PARTICIPANTS MUST BRING THEIR PLTW LAPTOP TO PARTICIPATE. 2 Hour Session</b>—Presenter: <i>Ms. Kelly McGregor</i></p>
9:00-3:00	Engineering/Technology <b>VENDORS OPEN</b> (Feel free to visit at any time)
9:15-10:15	<p>Session 1—<b>Administrator and Guidance Guide to Technology and Engineering Education Programs.</b> This informative session will cover the basics of what encompasses technology and engineering education including funding, curriculum, job outlook, dual credit, and post-secondary opportunities for your students. Presenters: <i>Mr. Gary Wynn and Mr. Mike Fitzgerald</i></p>
	<p>Session 2—<b>Project Move It.</b> Looking for a way to incorporate STEM at the middle school level in a way that gets students excited, engaged, and eager to learn? Learn how to get involved with Project Move it! Project Move It is an experiential learning project that teaches middle students (and teachers) how to design, fabricate, and competitively test fuel efficient go carts while applying science, technology, engineering, and mathematics principles and standards. Engineering materials and consumables are provided and teacher stipends may be available. This exciting summer program can serve as a standalone program or one that naturally complements other high school competitions. <i>Dr. Les Lunsford</i></p>
	<p>Session 3—<b>Teacher, What’s your Style?</b> The individual classroom teacher is the most important factor affecting student learning. Participants will gain an understanding of the importance of how students learn through this hands-on session on, how teacher’s teaching style impacts various student learning styles, meta-cognition, and reflective practice. As a result, educators can adequately adapt their teaching practices to reach every student thus creating student success. Presenter: <i>Dr. Steve McCaskey</i></p>
	<p>Session 4—<b>Project Lead the Introduction to Engineering Design Help Session—Continued</b></p>
10:30-11:30	<p>Session 1—<b>Certifying Your Project Lead the Way Program.</b> High School Project Lead the Way programs must be certified by the second year in the program and re-certified every five years after. This process requires schools to demonstrate that they meet PLTW’s quality standards in professional development of teachers and counselors; the implementation of curriculum using required equipment and software; the formation of a Partnership Team, and several other criteria. This session will help to guide you through the “how to’s” of the certification process. Presenters <i>Ms. Rene Bailey and Mr. Don Kunkle</i></p>

- Session 2—**TECA Student Session: Student Teaching and Living to Tell About It!** Ever wonder what awaits you during your student teaching semester? In this session student teachers from Indiana State University, Purdue University, and Ball State University will share some of the tips, tricks, and pitfalls that will help you to have a successful student teaching experience. Moderator: *Dr. Kara Harris*
- Session 3—**How Can Being a TREKie and Getting FIT Benefit Your Students? Getting Your Students Involved in Tech TREK and Females in Technology.** Looking for university outreach programs that will complement and supplement your curriculum through hands-on and problem-solving activities? This session will give information on how you and your students can get involved in two very different programs at Indiana State University that focus on technology/engineering education and getting females involved in technology/engineering programs. Presenter: *Ms. Bev Bitzegaio*
- Session 4—**Integrating Math into the STEM Classroom.** Looking for ways to integrate math into your classroom in such a way students “get it”? This session will focus on different approaches for math integration into the STEM classroom to boost student success. Presented By: *Vigo County School Corporation*
- 11:45-12:15 **Department of Education Engineering-Technology Education Update**—Presenter: *Mr. Mike Fitzgerald*
- 12:30-1:45 **Lunch and E/TEI Awards—Join us for lunch and awards session in the conference hotel.** Featured guest speaker, Dr. Kraig Olejniczak, Dean of the College of Engineering, Valparaiso University. *Lunch is included in the price of registration.*
- 2:00-3:00 Session 1—**Aero Lab Hands-On Session.** Aero Lab is a hands-on, inquiry-based program in conceptual physics, math and technology for middle school through 9th grade students. Students build simple flying machines to teach forces, motion, practice math skills and technology. This is multi-disciplinary labs program meets many standards. Presenter: *Mr. Jack Frost*
- Session 2—**Creating an Updated Standards-Based Communications Classroom.** OMG, T911 (Oh my gosh, teacher alert change the subject). Do you sometimes wonder how to keep up with the students when it comes to new communications-based technologies? The world of communications has changed drastically over the past few years. This presentation will focus on ways of using different types of communications to catch the interest of your students while teaching them about technology in a standards-based approach. **IT IS RECOMMENDED (BUT NOT REQUIRED) PARTICIPANTS BRING LAPTOPS** Presenter: *Dr. Kara Harris*
- Session 3—**Creating Competitive Events for Your Classroom.** This session will focus on the use of contests, group challenges, and formal competitive events as a means of introducing technological and engineering concepts. Details related to organizing and conducting fair, informative, and worthwhile events will be covered. Presenter: *Dr. Richard Seymour*
- Session 4—**Experiences with Lily Endowment Teacher Creativity Fellowships.** This session will give a first-hand perspective from a technology/engineering education teacher on how to apply, get involved, and what to expect when working with Lily Endowment Teacher Creativity Fellowships. Presenter: *Mr. Doug Hunt*
- 3:15-5:00 **E/TEI Business Meeting—Conclusion of the 78<sup>th</sup> Annual E/TEI conference.** Elections of E/TEI officers and E/TEI business will be discussed and voted upon. Please plan to attend. Your vote and professional input is always needed as we collaboratively work to advance excellence and support for your students, community, profession, and YOU!



Engineering/Technology Educators is an Affiliate of the International Technology Education Association (ITEA).  
Membership in ITEA is encouraged.

This is a preliminary conference schedule—sessions are subject to change.



## **Pre-Conference Workshop Registration**

**Saturday October 31<sup>st</sup>, 2009**

9:00-4:00      **Session 1:** Lego Robotics—Pre-conference Workshop (for pre-service, elementary and/or middle school teachers) In this hands-on workshop participating STEM teachers will gain experience how to use Lego NXT robots in the classroom and as a part of student competitive events. This workshop is limited to 16 participants from 8 schools. Applications to participate are due by October 20, 2009. Cost: \$50.00 per school.

School Name\_\_\_\_\_

Participants\_\_\_\_\_

+++++

9:00-4:00      **Session 2:** The CAD Academy—Pre-conference Workshop (for pre-service, middle and/or high school teachers). A comprehensive pre-engineering, pre-architecture and interdisciplinary K-12 program culminating with student certification.

Track One: 3 HR - Mechanical featuring SolidWorks participants will experience the form, fit and function of 3D mechanical design before it is built (STEM centric)

Track Two: 3 HR - Architecture featuring ArchiCAD participants will learn how the power of BIM will unlock student potential and vault your design program to new heights.

Applications to participate are due by October 20, 2009. Cost: \$25.00 per participant.

This session will take place at Zionsville High School. See info at hotel for directions.

Participants Name\_\_\_\_\_

School\_\_\_\_\_

**\*\*\*Please return this registration page with conference registration**

**Engineering/Technology  
Educators of Indiana  
Conference Registration Form**

November 1-2, 2009

Name (First / Last) \_\_\_\_\_ Date \_\_\_\_\_

School (if applicable) \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Home Phone(\_\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

E-mail Address (for confirmation) \_\_\_\_\_

School Phone(\_\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

E/TEI Dues paid for the current year? YES NO (Your E/TEI District # \_\_\_\_\_)

**REGISTRATION BEFORE 10/23/2009**

- Member Registration \$60.00 \_\_\_\_\_
- Non-Member Registration \$80.00 \_\_\_\_\_
- Student Member Registration \$20.00 \_\_\_\_\_
- Retired Member Registration \$30.00 \_\_\_\_\_

**AT THE CONFERENCE**

- \$65.00 \_\_\_\_\_
- \$85.00 \_\_\_\_\_
- \$25.00 \_\_\_\_\_
- \$30.00 \_\_\_\_\_

**DONATIONS**

Golden Club (\$50)

Silver Club (\$25)

John Gray Memorial Fund: \$ \_\_\_\_\_ Gregg Steele Scholarship Fund \$ \_\_\_\_\_

Total Amount \$ \_\_\_\_\_

\*Notes: ALL registration prices include lunch on Monday.

ITEA membership is not required for attendance at the E/TEI conference.

**Please pay for E/TEI conference registration by check, cash or purchase order.**

E/TEI cannot process credit/debit card transactions

**MAKE PAYMENTS PAYABLE TO E/TEI**

**Highly Recommended "ITEA" membership opportunity!**



ASK Your E/TEI representative for an ITEA membership form today!  
The Engineering/Technology Educators of Indiana is a proud affiliate  
of ITEA and strongly encourages unified membership in ITEA

**RETURN FORM TO:**

Becky Taylor, Conference Registration  
3459 E. 300 N.  
Greenfield, IN 46140

**RECEIVED**

Date:

Check # / P.O.#:

# Engineering / Technology Educators of Indiana

Date: November 1-2 2009

Theme: "The Heart of STEM Education" 78th Annual E/TEI Conference

Location: Indianapolis Embassy Suites North  
3912 Vincennes Road  
Indianapolis, Indiana 46268



## Reservation Information

To make room reservations for the conference you may contact the hotel at 317-872-7700. Please be sure to make your reservation in the block of rooms designated for the Technology Educators of Indiana to receive the best rate. Current rates have been quoted to be \$109 per night. Rates are subject to change. Please reserve your room soon. Cut-off date has been established as Oct. 1<sup>st</sup>, 2009

- Phone: 317-872-7700
- Web: <http://www.indianapolisnorth.embassysuites.com>

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The Engineering/Technology Educators of Indiana is an affiliate of ITEA.  
Plan now to also attend the International Technology Education Association Conference  
in Charlotte, North Carolina on

March 18-20, 2010

Green Technology: STEM  
Solutions for 21st Century



For more information: <http://www.iteaconnect.org>



E/TEI is an affiliate of ITEA. To renew your membership in ITEA  
please complete the form below and mail to:

ITEA Membership  
1914 Association Dr.  
Suite 201  
Reston, VA 20191



## MEMBERSHIP APPLICATION

**JOIN ITEA**  
AND RECEIVE THESE  
MEMBER BENEFITS:  
**The Technology Teacher**  
(all memberships)  
**Technology and Children**  
(group memberships)  
**Grants & Scholarships**  
**Professional Development**  
**Publications Discounts**  
**Recognition & Awards**  
**Government Relations**  
**Insurance Programs**  
**Networking Opportunities**  
**Online Resources**

**Our members** are classroom teachers from elementary to high school, local and state/provincial supervisors, college/university faculty, and museum staff. Their common ground is an interest and involvement in technology education. Founded in 1939, ITEA brings together technology education professionals to share ideas, gain professional development, and improve public understanding of technological literacy.

☐ New ☐ Renew Member ID# \_\_\_\_\_

Check preferred mailing address: ☐ Home ☐ School/Business

Name _____			School or Business _____		
Home Address _____			Address _____		
City _____	State/Province _____	Zip + 4/Postal Code _____	City _____	State/Province _____	Zip + 4/Postal Code _____
Phone _____	Fax _____	Email _____	Phone _____	Fax _____	Email _____

### Individual Membership

Professional (U.S.A.)	<input type="checkbox"/> 2 Year	\$155	<input type="checkbox"/> 1 Year	\$80
Canada & Mexico	<input type="checkbox"/> 2 Year	\$165	<input type="checkbox"/> 1 Year	\$85
Other Foreign	<input type="checkbox"/> 2 Year	\$175	<input type="checkbox"/> 1 Year	\$90
Undergraduate Student – first-time member	<input type="checkbox"/> 1 Year	\$35		
Full-time Grad./Renewing Undergraduate Student	<input type="checkbox"/> 1 Year	\$40		
Bridge – one-time Student to Professional	<input type="checkbox"/> 1 Year	\$65		
Advocate (includes TIDE, Retired, and Sustaining Technical Rep.)	<input type="checkbox"/> 1 Year	\$40		

### Group Membership

Elementary School	<input type="checkbox"/> 2 Year	\$310	<input type="checkbox"/> 1 Year	\$160
Institutional (University)	<input type="checkbox"/> 2 Year	\$470	<input type="checkbox"/> 1 Year	\$240
Museum	<input type="checkbox"/> 2 Year	\$470	<input type="checkbox"/> 1 Year	\$240
Corporate	<input type="checkbox"/> 2 Year	\$790	<input type="checkbox"/> 1 Year	\$400

### Payment

**Must be in U.S. Currency and drawn on a U.S. bank.**

- ☐ P.O. # \_\_\_\_\_ (Attach Original)  
☐ Check enclosed (made payable to ITEA)  
☐ Please charge \$ \_\_\_\_\_ to:  
☐ VISA ☐ MasterCard ☐ Discover

Card Number \_\_\_\_\_  
 Exp. Date \_\_\_\_\_ Signature \_\_\_\_\_

### Optional Councils (ITEA Membership Required)

*Two-year ITEA dues? Don't forget to double your council dues, too!*

- ☐ CTTE – Teacher Educator \$40  
☐ CS – Supervisors \$20  
☐ TECC – Elementary \$25 (Includes *Technology and Children*)

### Optional Subscriptions

- ☐ *The Technology Teacher* (electronic version - pdf) \$65/year  
☐ *Technology and Children* (4x a year)  
**U.S.: \$45, Members \$35 Foreign: \$55, Members \$45**  
☐ *Technology and Children* (electronic version - pdf) \$30/year  
☐ *Journal of Technology Education* \$15/year; \$20 outside U.S.

### General Position

- ☐ Elementary Teacher ☐ Male  
☐ Middle/Junior High Teacher ☐ Female  
☐ High School Teacher  
☐ Supervisor/Administrator  
☐ Junior/Community College Professor  
☐ University Professor  
☐ Undergraduate College Student  
☐ Graduate Student  
☐ Retired  
☐ Non Teaching/Consulting/Sales  
☐ TIDE (Technology/Design/Engineering)

### Age Range

- ☐ 18-25  
☐ 26-35  
☐ 36-45  
☐ 46-55  
☐ Over 55

Phone: 703-860-5032  
 Fax: 703-860-0353  
 Email: [members@iteaconnect.org](mailto:members@iteaconnect.org)  
 Mail: 1914 Association Drive  
 Suite 201  
 Reston, VA 20191-1539

**MORE THAN A MEMBERSHIP! JOIN TODAY.**

Join online at:  
[www.iteaconnect.org/Membership/membership.htm](http://www.iteaconnect.org/Membership/membership.htm)



# INDIANA TECH FLASH NEWSLETTER

**Mike Fitzgerald**  
Technology Education Specialist  
Indiana Department of Education  
mfitzger@doe.in.gov  
317-232-6990

It is the policy of the Indiana Department of Education not to discriminate on the basis of race, color, religion, sex, national origin, age, or disability, in its programs, activities, or employment policies as required by the Indiana Civil Rights Law (I.C. 22-9-1), Title VI and VII (Civil Rights Act of 1964), the Equal Pay Act of 1973, Title IX (Educational Amendments), Section 504 (Rehabilitation Act of 1973), and the Americans with Disabilities Act (42 USCS §12101,et. seq.).

Inquiries regarding compliance by the Indiana Department of Education with Title IX and other civil rights laws may be directed to the Human Resources Director, Indiana Department of Education, Room 229, State House, Indianapolis, IN 46204-2798, or by telephone to 317-232-6610, or the Director of the Office for Civil Rights, U.S. Department of Education, 111 North Canal Street, Suite 1053, Chicago, IL 60606-7204



The screenshot shows the Indiana Department of Education website. At the top is the 'IN.gov' logo and a search bar. Below the logo are navigation links for various departments: Agriculture & Environment, Business & Employment, Education & Training, Family & Health, Law & Justice, Public Safety, Taxes & Finance, and Tourism & Transportation. The main header features the Indiana Department of Education logo and the tagline 'SUPPORTING STUDENT SUCCESS'. A sidebar on the left lists various resources and links. The main content area displays a video player for 'Dr. Tony Bennett's Podcast April 3rd, 2009'. The video player includes a play button, a progress bar, and a download link. The video title is 'Dr. Tony Bennett's Podcast April 3rd, 2009'.

The document is titled 'THE VISION' and 'THE PLAN' from the Indiana Department of Education. The vision statement reads: 'The academic achievement and career preparation of all Indiana students will be the best in the United States and on par with the most competitive countries in the world.' The plan is divided into two main sections: 'THE VISION' and 'THE PLAN'. Under 'THE VISION', it states: 'The academic achievement and career preparation of all Indiana students will be the best in the United States and on par with the most competitive countries in the world.' Under 'THE PLAN', it lists several goals and strategies:

- 1. Create and promote a statewide culture of academic excellence, in which at least:
  - a) 90% of students pass both Math and English/Language Arts sections of ISTEP+ and End-of-Course Assessments;
  - b) 25% of all graduates receive a score of 3, 4 or 5 on at least one Advanced Placement exam, a 4 or higher on an International Baccalaureate exam, or receive the equivalent of 3 semester hours of college credit during their high school years; and
  - c) 90% of students graduate from high school.
- Institute and sustain an emphasis on reading at the elementary level and integrate reading and writing into all content areas to ensure students are able to comprehend and to apply new knowledge across the curriculum and in practical settings.
- Advance learning in the Science, Technology, Engineering and Mathematics (STEM) areas.
- Drive college preparedness by designing and implementing a coherent Advanced Placement (AP) course strategy, including a focus on AP readiness at the middle school level and an aggressive dual-credit strategy.
- Focus on middle school success by ensuring an engaging learning environment that demands academic rigor, begins career preparation awareness and builds upon elementary achievement in basic skills.
- Integrate Title I, English Language Learners (ELL), High Ability and Special Education programs seamlessly into the learning environment by focusing on meeting the needs of the child and complementing the learning experience.
- Create multiple pathways for learning that enable all students to attain postsecondary success.
- Create a vibrant statewide Career and Technical Education program through the creation of state of the art Programs of Study that integrate rigorous academic standards, prepare students

See the NEW IDOE Vision and Plan at:  
<http://www.doe.in.gov/actionplan/index.html>